

Feynman-Kac path-integral calculations with high-quality trial wave functions

Datta S., Fry J., Fazleev N., Alexander S., Coldwell R.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

We have computed the ground-state energies of the lithium and beryllium atoms using the Feynman-Kac path-integral method and high-quality trial wave functions. Our results are in excellent agreement with the best nonrelativistic values for these systems.
